

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
18 January 2001 (18.01.2001)

PCT

(10) International Publication Number  
**WO 01/04108 A1**

(51) International Patent Classification<sup>7</sup>: **C07D 319/18**,  
295/12, A61K 31/40, 31/4025, A61P 35/04

48103 (US). RADIN, Norman, S. [US/US]; 350 Sharon  
Park Drive, Apt. S5, Menlo Park, CA 94025-6802 (US).

(21) International Application Number: PCT/US00/18935

(74) Agents: GIBBS, Barbara, S. et al.; Harness, Dickey &  
Pierce, P.L.C., P.O. Box 828, Bloomfield Hills, MI 48303  
(US).

(22) International Filing Date: 7 July 2000 (07.07.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
09/350,678 9 July 1999 (09.07.1999) US

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ,  
DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,  
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,  
NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,  
TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(63) Related by continuation (CON) or continuation-in-part  
(CIP) to earlier application:  
US  
Filed on 9 July 1999 (09.07.1999)  
**09/350,678 (CON)**

(84) Designated States (*regional*): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian  
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European  
patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,  
IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG,  
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (for all designated States except US): RE-  
GENTS OF THE UNIVERSITY OF MICHIGAN  
[US/US]; Technology Management Office, Room 2071,  
Wolverine Tower, 3003 South State Street, Ann Arbor, MI  
48109-1280 (US).

**Published:**

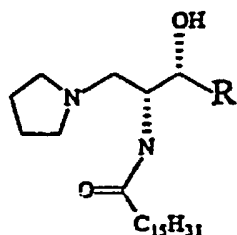
- With international search report.
- Before the expiration of the time limit for amending the  
claims and to be republished in the event of receipt of  
amendments.

(72) Inventors; and

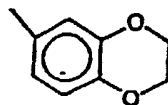
(75) Inventors/Applicants (for US only): SHAYMAN, James,  
A. [US/US]; 1890 Snowberry Ridge Road, Ann Arbor, MI

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

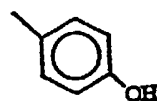
(54) Title: AMINO CERAMIDE-LIKE COMPOUNDS AND THERAPEUTIC METHODS OF USE



R=



(1)



(57) Abstract: Novel amino ceramide-like compounds (1) are provided which inhibit glucosyl ceramide (GlcCer) formation by inhibiting the enzyme GlcCer synthase, thereby lowering the level of glycosphingolipids. The compounds of the present invention have improved GlcCer synthase inhibition activity and are therefore highly useful in therapeutic methods for treating various conditions and diseases associated with altered glycosphingolipid levels.

WO 01/04108 A1